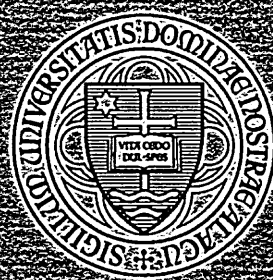


THE UNIVERSITY OF
NOTRE DAME DU LAC
1991 COMMENCEMENT
AUGUST 2



OFFICIAL

THE UNIVERSITY OF

NOTRE DAME DU LAC

1991 COMMENCEMENT

AUGUST 2



Events of the Day

Friday, August 2, 1991.

BACCALAUREATE MASS

- 8:30 a.m. Graduates and faculty assemble in the corridor on the second floor of the Main Building for the Academic Procession to Sacred Heart Church.
- 8:40 a.m. Academic Procession departs for Sacred Heart Church.
- 9:00 a.m. Baccalaureate Mass ——— Sacred Heart Church.

Principal Celebrant and Homilist:

Rev. Regis Duffy, O.F.M.
Associate Professor of Theology

Concelebrants:

Priests who will receive degrees during the Commencement Exercises, priest members of the faculty, and priest members of the Congregation of Holy Cross.

COMMENCEMENT EXERCISES CONFERRAL OF DEGREES

- 10:25 a.m. Graduates and faculty assemble in the North Dome of the Joyce Athletic and Convocation Center.
- 10:50 a.m. Academic Procession begins.
- 11:00 a.m. Conferring of Degrees in the Joyce Athletic and Convocation Center ——— Concourse.

Presiding Officer:

Timothy O'Meara, Ph.D.
Provost of the University

Commencement Address:

Wm. David Solomon, Ph.D.
Associate Professor of Philosophy

(Guests are requested to be seated on the Concourse of the Joyce Athletic and Convocation Center by 10:50 a.m.)

BACCALAUREATE MASS

Sacred Heart Church
University of Notre Dame
Notre Dame, Indiana
At 9 a.m. EST
Friday, August 2, 1991

Principal Celebrant and Homilist
Rev. Regis Duffy, O.F.M.

Deacon
Rev. Mr. Patrick Malloy

Organist
Robert Minotti

Psalmist
Anne McGuire

Cantor
Johann VanParys

The Symphony Brass Quintet
Craig Heitger, *trumpet*
Steve Reed, *trumpet*
Peggy Brilli, *French horn*
Joe Hickner, *trombone*
Mike Shannon, *tuba*

BACCALAUREATE MASS

PRELUDES

ACADEMIC PROCESSION

Trumpet Voluntary Stanley

ENTRANCE HYMN

I Sing the Mighty Power of God

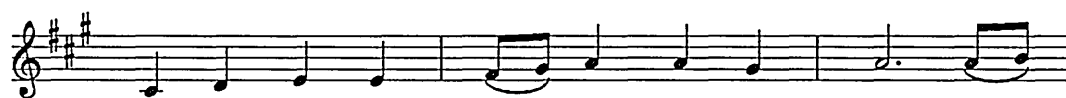
tune: Ellacombe



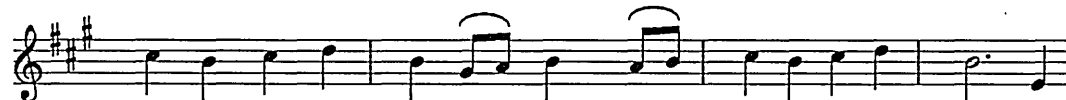
1. I sing the mighty pow'r of God That
 2. I sing the goodness of the Lord That
 3. There's not a plant or flower be- low But



made the moun- tains rise, That spread the flow- ing
 filled the earth with food; That formed cre - a - tion
 makes your glo- ries known; And clouds a - rise, and



seas a- broad, And built the loft- y skies. I
 with a word, And then pro- nounced it good. Lord,
 tem- pests blow, By or - der from your throne; While



sing the wis- dom that or - dained The sun to rule the day; The
 how your won- ders are dis - played, Where- e'er I turn my eye; If
 all that bor- rows life from you Is ev- er in your care, And



moon shines full at God's com- mand And all the stars o- bey.
 I sur - vey the ground I tread, Or gaze up- on the sky!
 ev- 'ry - where that I may be, O God, be pre- sent there.

OPENING PRAYER

Liturgy of the Word

READING I

Leviticus 23:1, 4-11, 15-16, 27, 34-37

RESPONSORIAL PSALM

Psalm 81:3-6, 10-11

Currie



GOSPEL ACCLAMATION



GOSPEL

Matthew 13:54-58

HOMILY

Rev. Regis Duffy, O.F.M.

GENERAL INTERCESSIONS



Liturgy of the Eucharist

PREPARATION OF THE GIFTS

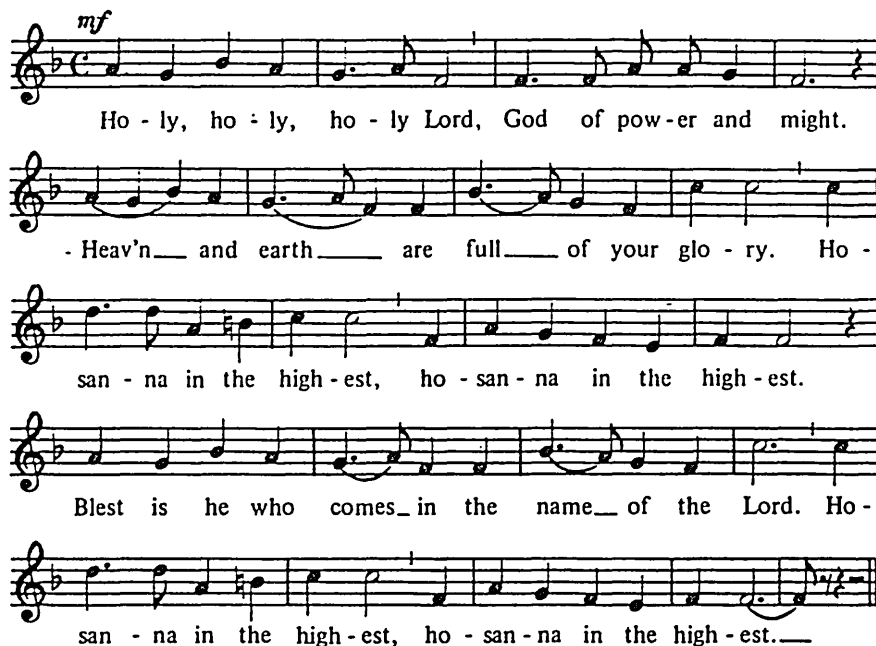
Pavane William Byrd
Fantasia William Boyce

Eucharistic Prayer

*It is customary for men,
although not for women
wearing academic garb, to
have their caps removed during
the Eucharistic Prayer.
The caps may be replaced
at the end of Communion.*

SANCTUS

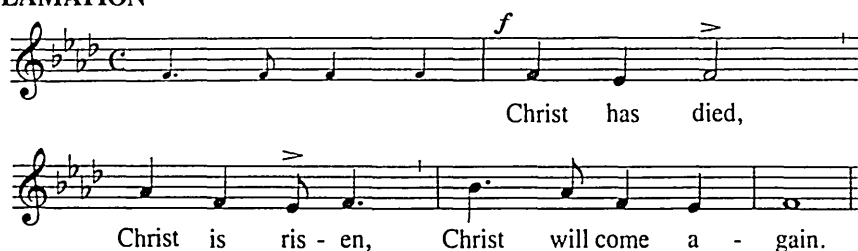
mf



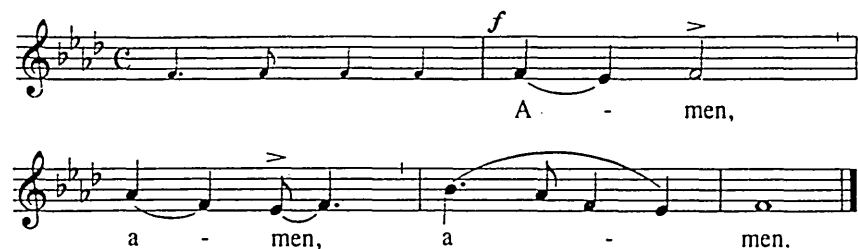
Ho - ly, ho - ly, ho - ly Lord, God of pow - er and might.
- Heav'n and earth are full of your glo - ry. Ho -
san - na in the high - est, ho - san - na in the high - est.
Blest is he who comes in the name of the Lord. Ho -
san - na in the high - est, ho - san - na in the high - est.

Proulx

MEMORIAL ACCLAMATION



AMEN



Communion Rite

LORD'S PRAYER + DOXOLOGY

SIGN OF PEACE

LAMB OF GOD

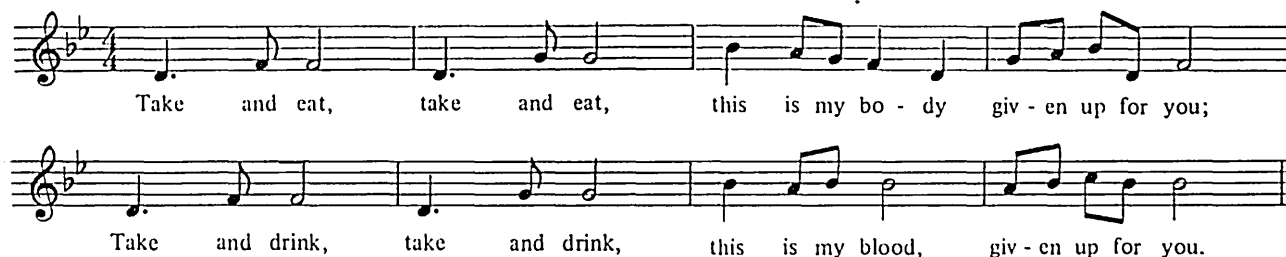
Isele



COMMUNION PROCESSION

Take and Eat

Joncas



PRAYER AFTER COMMUNION

Closing Rite

BLESSING + DISMISSAL

HYMN

Lord, Whose Love in Humble Service

tune: *In Babilone*

1. Lord, whose love in hum - ble ser - vice Bore the
2. Still your chil - dren wan - der home - less; Still the
3. Called from wor - ship in - to ser - vice Forth in

weight of hu - man need, Who did on the
hun - gry cry for bread; Still the cap - tives
your great name we go, To the child, the

Cross for - sak - en, Show us mer - cy's per - fect deed;
long for free - dom; Still in grief we mourn our dead.
youth, the a - ged, Love in liv - ing deeds to show;

We, your ser - vants, bring the wor - ship Not of
As, O Lord, your deep com - pas - sion Healed the
Hope and health, good - will and com - fort, Coun - cil,

voice a - lone, but heart: Con - se - crat - ing
sick and freed the soul, Use the love your
aid, and peace we give That your chil - dren,

to your pur - pose Ev - 'ry gift which you im - part.
Spir - it - kin - dles Still to save and make us whole.
Lord, in free - dom, May your mer - cy know and live.

RECESSIONAL

Psalm XIX Marcello
Sonata from "Die Bankelsangerlieder" Anonymous

Acknowledgements

Psalm 81 by Randolph Currie, the Community Mass by Richard Proulx, Lamb of God by David Isele, and
Take and Eat by Michael Joncas © GIA Publications, Inc., Chicago, IL. All rights reserved under license #1180.

ONE HUNDRED FORTY-SIXTH

COMMENCEMENT EXERCISES

The Graduate School
The Law School
The College of Arts and Letters
The College of Science
The College of Engineering
The Graduate and Undergraduate Divisions of
the College of Business Administration

Joyce Athletic and Convocation Center
(Concourse)
University of Notre Dame
Notre Dame, Indiana
At 11:00 a.m. EST
Friday, August 2, 1991

Order of Exercises

Processional

by Andrew L. Hollander, Ph.D.
Interim University Registrar

America, the Beautiful

*O beautiful for spacious skies,
For amber waves of grain
For purple mountain majesties
Above the fruited plain.
America! America!
God shed His grace on thee,
And crown thy good with brotherhood
from sea to shining sea.*

Convening of the Convocation

by Timothy O'Meara, Ph.D.
Provost of the University

Presentation of Candidates for Degrees

The Doctor of Philosophy degree
by Chau T. M. Le, Ph.D.
Associate Dean of the Graduate School

The Master of Laws degree
by Joseph P. Bauer, J.D.
Associate Dean of the Law School

The Juris Doctor degree
by Joseph P. Bauer, J.D.
Associate Dean of the Law School

The Master degree
by Chau T. M. Le, Ph.D.
Associate Dean of the Graduate School

The Master of Business Administration degree
by John G. Keane, Ph.D.
Dean of the College of Business Administration

The Master of Science in Administration degree
by John G. Keane, Ph.D.
Dean of the College of Business Administration

The Bachelor degree in the College of Arts
and Letters
by Anastasia F. Gutting, Ph.D.
Assistant Dean of the College of Arts and Letters

The Bachelor degree in the College of Science
by Jeremiah P. Freeman, Ph.D.
Associate Dean of the College of Science

The Bachelor degree in the College of Engineering
by Jerry J. Marley, Ph.D.
Associate Dean of the College of Engineering

The Bachelor degree in the College of Business
Administration
by John G. Keane, Ph.D.
Dean of the College of Business
Administration

Commencement Address*

Wm. David Solomon, Ph.D.
Associate Professor of Philosophy

Closing Remarks

Provost of the University

Notre Dame, Our Mother*

O'Donnell-Casasanta

*Notre Dame, Our Mother, tender,
strong and true
Proudly in the heavens gleams thy
gold and blue.
Glory's mantle cloaks thee, golden is
thy fame
And our hearts forever praise thee,
Notre Dame:
And our hearts forever love thee,
Notre Dame.*

Recessional of the Platform Party

**It is customary for men, although not for women wearing
academic garb, to have their caps removed during the
Commencement Address and the singing of the Alma Mater.*

The Graduate School

THE DEGREE OF DOCTOR OF PHILOSOPHY ON:

Zeid Ayer, Bombay, India

Major subject: Physics. Dissertation: Study of the ^3He (d, ^3He p)n and ^3He (d, t p)p Reactions using 17 MeV Polarized Deuterons. Director: Dr. Sperry G. Darden

Gregory Howard Bassham, Tulsa, Oklahoma

Major subject: Philosophy. Dissertation: Original Intent and the Constitution: A Philosophical Study. Director: Dr. John H. Robinson

Richard Rene Gaillardetz, Austin, Texas

Major subject: Theology. Dissertation: The Development of Theologies of the Ordinary Universal Magisterium 1840-1990. Director: Rev. Thomas F. O'Meara, O.P.

Franz Goller, Kartitsch, Austria

Major subject: Biological Sciences. Dissertation: Temperature Limits to Flight Muscle Function in Insects. Director: Dr. Harald E. Esch

Malini Gupta, Lucknow, India

Major subject: Chemical Engineering. Dissertation: Fundamental Analyses of Heat and Mass Transfer in Two Phase Flows. Director: Dr. Mark J. McCready

John Wilson Hawes, Indianapolis, Indiana

Major subject: Chemistry. Dissertation: Characterization of α -L-Fucosyltransferases from Neuronal and Non-Neuronal Tissues. Director: Dr. Subhash C. Basu

Mary Hermann Kelly, St. Louis, Missouri

Major subject: English. Dissertation: Sir Charles Grandison: *Samuel Richardson's Bildungsroman*. Director: Dr. James H. Walton

Yong Liang, Shanghai, People's Republic of China

Major subject: Physics. Dissertation: Scanning Tunneling Microscopy of Semiconductors. Director: Dr. John D. Dow

Timothy Yeong-shyang Liao, Taipei, Taiwan, People's Republic of China

Major subject: Theology. Dissertation: The Just War Theory in the Teaching of Mo Tzu. Co-directors: Dr. John J. Collins and Dr. John H. Yoder

Patrick Leo Malloy, Mt. Savage, Maryland

Major subject: Theology. Dissertation: A Manual of Prayers (1583-1850): A Study of Recusant Devotions. Director: Dr. Paul F. Bradshaw

Michael McGettrick, Carlow, Ireland

Major subject: Physics. Dissertation: On Virasoro Constructions from Kac-Moody Algebras. Director: Dr. William D. McGlinn

Yerolemos Christos Michael, Lamaca, Cyprus

Major subject: Aerospace Engineering. Dissertation: Three-Dimensional Temperature Reconstruction using Mach-Zehnder Interferometric Tomography. Director: Dr. Kwang-Tzu Yang

Mark Matthew Moes, Dubuque, Iowa

Major subject: Philosophy. Dissertation: Plato's Dialogue Form and the Cure of the Soul. Director: Dr. Kenneth M. Sayre

Roger G. Olson, Horton, Michigan

Major subject: Mathematics. Dissertation: The Coefficient of t'' in the Asymptotic Expansion of the Local Trace of the Heat Kernel for the $2b$ - Laplacian on $(0,1)$ -Forms on a Compact Strictly Pseudoconvex CR Manifold. Director: Dr. Nancy K. Stanton

Stanley Polchlopek, Chicopee, Massachusetts

Major subject: Electrical Engineering. Dissertation: A Study of Insulator Structures Formed by High Dose Nitro Implantation. Director: Dr. William B. Berry

E. Lance Simmons, Dallas, Texas

Major subject: Philosophy. Dissertation: What Incommensurability Claims Mean: A Study of Ludwick Fleck's Contribution to the Incommensurability Debate. Director: Dr. Alasdair MacIntyre

Bruce C. Smith, New Castle, Indiana

Major subject: History. Dissertation: John Augustus Griswold and the Development of Bessemer Steelmaking in the United States, 1818-1872. Director: Dr. Walter Nugent

Suzanne Konzelmann Smith, Springfield, Illinois

Major subject: Economics. Dissertation: Technological Integration and Fragmented Labor Market Structures: The Decline and Restructuring of the U.S. Steel Industry. Director: Prof. Samuel F. Wilkinson

Because of the early publication of this commencement program it should not be considered an official listing of graduates. Late changes to the listing of graduates are inevitable, particularly in the determination of graduation honors distinctions.

Jan Spalinski, Warszawa, Poland

Major subject: Mathematics. Dissertation: Strong
Homotopy Theory of Cyclic Sets. Director:
Dr. William G. Dwyer

Laura Ann Van Wormer, Lambertville, Michigan

Major subject: Physics. Dissertation: Energy
Levels in ^{32}Cl above the Proton Threshold and
Astrophysical Network Calculations.
Director: Dr. Cornelius P. Browne

Eugene Timothy Walch, Winston-Salem, North Carolina

Major subject: Biological Sciences. Dissertation:
Interrelationships between Branched-Chain Acid
Metabolisms of *Ascaris suum* Muscle, Reproductive
and Egg Tissues. Director: Dr. Howard J. Saz

Dean O. Wenthe, Ft. Wayne, Indiana

Major subject: Theology. Dissertation: The
Old Greek Translation of Daniel 1-6. Director:
Dr. Eugene C. Ulrich

Hao Y. Xu, Beijing, People's Republic of China

Major subject: Biological Sciences. Dissertation:
Two Groups of α -Adrenoceptors on Blood
Vessels Involved in Neuronal and Humoral
Regulation of Blood Pressure in Rainbow
Trout (*Oncorhynchus mykiss*). Director:
Dr. Kenneth R. Olson

The Law School

THE DEGREE OF MASTER OF LAWS ON:

Hann-Hsi Chai, Kaohsiung, People's Republic of China

Nongnapa Chantarasak, Bangkok, Thailand

Shang-jen Chiang, Kaohsiung,

People's Republic of China

Luis Antonia de Souza, Sao Paulo, Brazil

Wei Chi Huang, Taipei, People's Republic of China

Wen-Yao Kang, Taipei, People's Republic of China

Victor Stanley Kudra, Adelaide, Australia

Chin-lung Kung, Taipei, People's Republic of China

Ernesto Lima Mena, Benito, San Salvador, El Salvador

Jose Juan Marquez, Panama, Panama

Pei-Chin Mou, Taipei, People's Republic of China

Edgardo M. Rodriquez-Quilichini, Guaynabo,
Puerto Rico

Deborah Angiolina Sanchez, Woodside, New York

Fiona Jane Shelton, Wakefield, England

Rong-Ging Wang, Taipei, People's Republic of China

Chen-Hsing Wei, Kaohsiung, People's Republic of China

Keiko Yajima, Mito-city, Japan

THE DEGREE OF JURIS DOCTOR ON:

Colleen Marie Browne, Bayside, New York

John Headley, Brooklyn, New York

The Graduate School

THE DEGREE OF MASTER OF FINE ARTS ON:

Miklos P. Simon, Chicago, Illinois

Thesis: In Search for a New Sculptural Paradigm.

Director: Rev. Austin I. Collins, C.S.C.

THE DEGREE OF MASTER OF MEDIEVAL STUDIES ON:

Lisa Wolverton, Denver, Colorado

THE DEGREE OF MASTER OF MUSIC ON:

Michael Edward Ruhling, Goshen, Indiana

Sara Lynn Thomas, Nashville, Tennessee

THE DEGREE OF MASTER OF ARTS ON:

Jayne Newton Ahearn, Honolulu, Hawaii

Major subject: Theology

Sigrid Arzt, Mexico City, Mexico

Major subject: Peace Studies

Claire Egan Bardenheier, Essex, Connecticut

Major subject: History

SuzAnne Ruth Beckley, Howell, Michigan

Major subject: Communication Arts

Eileen Beatty Biagi, Evansville, Indiana

Major subject: Psychology. Thesis: How Typical
and Atypical Gender Roles are Valued. Director:
Dr. Naomi M. Meara

Pamela Biehl, O.S.F., Manitowoc, Wisconsin

Major subject: Theology

Brenda Lynn Boughal, South Bend, Indiana

Major subject: Psychology

Emile R. Boutin, Jr., Lowell, Massachusetts

Major subject: Theology

Jose Alberto Carrera, Pichincha, Ecuador

Major subject: Economics

- Maria Anne Cataldo**, Worcester, Massachusetts
Major subject: Theology
- Vienna Colucci**, Hammond, Indiana
Major subject: Theology
- William M. Corcoran**, Calgary, Canada
Major subject: Theology
- Jean Corr**, Orlando, Florida
Major subject: Communication Arts
- Allan Ramsay Crosbie**, Crieff, Scotland
Major subject: Peace Studies
- Ruth Ellen Cunnings**, Memphis, Michigan
Major subject: History
- Darlene Cutrona**, Granger, Indiana
Major subject: Communication Arts
- Jacqueline Patricia Dellwo**, Delano, Minnesota
Major subject: Psychology
- Cathy Ann Doherty, S.S.N.D.**, St. Louis, Missouri
Major subject: Theology
- Timothy Lawrence Fischer**, Hamilton, Ohio
Major subject: Psychology. Thesis: Validation in Phenomenological Research: Life Themes from Brief Autobiographies. Director: Dr. George S. Howard
- David P. FitzGerald**, Cornwall, New York
Major subject: Psychology. Thesis: Pubertal Status, Separation-Individuation, and the "New Look" at the Imaginary Audience and Personal Fable. Director: Dr. Daniel K. Lapsley
- Suzanne A. Fournier**, Nashville, Tennessee
Major subject: Theology
- Sr. Regina C. Foy, I.H.M.**, Immaculata, Pennsylvania
Major subject: Theology
- Jennifer Louise Garner**, Oakton, Virginia
Major subject: Psychology
- Laurie Jane Garry**, Sioux Falls, South Dakota
Major subject: Theology
- Maria Evelyn Gomez**, Cabadbaran, Philippines
Major subject: Peace Studies
- Wendy Ann Gorski**, Cheektowaga, New York
Major subject: English
- Kelly Ann Hamilton**, South Bend, Indiana
Major subject: History and Philosophy of Science
- Jun Han**, Dalian, People's Republic of China
Major subject: Peace Studies
- Wilma Marie Hens**, Bend, Oregon
Major subject: Theology
- Edna Hidekel**, Jerusalem, Israel
Major subject: Peace Studies. Thesis: International Bargaining: The Israeli Delegation to Camp David - A Case of an Unprepared Delegation. Director: Dr. Alan Dowty
- Kim M. Holley**, Cleveland, Ohio
Major subject: Peace Studies
- Fan Jiang**, Mansfield Center, Connecticut
Major subject: Economics
- Elizabeth Jimenez-Zamora**, Potosi, Bolivia
Major subject: Peace Studies
- Toshio Kaneko**, Tokyo, Japan
Major subject: Peace Studies
- Vladimir Tikhonovich Khmelkov**, Cheboksary, Russia
Major subject: Peace Studies
- Susan Michele Kotwick**, Battle Creek, Michigan
Major subject: Communication Arts
- Mark Kramer**, St. Louis, Missouri
Major subject: Peace Studies
- John Ulrich Lee**, San Antonio, Texas
Major subject: Communication Arts
- Alan G. Lindsay**, Merrimack, New Hampshire
Major subject: English. Thesis: The Crossroads a Novella and Three Stories. Director: Dr. William A. O'Rourke
- Anthony Livorsi**, Glenview, Illinois
Major subject: Economics
- Carl Andrew Loesch**, Olympia Fields, Illinois
Major subject: Theology
- Luis Fernando Lopez**, Cali, Columbia
Major subject: Economics
- Robert Major**, Boulder, Colorado
Major subject: History
- Joan Morgan Martin**, Nampa, Idaho
Major subject: Psychology
- Patricia Anne McCabe**, Portland, Oregon
Major subject: Peace Studies
- Marleen Michele McKean**, St. Petersburg, Florida
Major subject: Theology
- Carol Susan Meaney**, Austin, Texas
Major subject: Psychology
- Michael Allen Miller**, Niskayuna, New York
Major subject: Economics
- Satoko Nakagawa**, Tokyo, Japan
Major subject: Peace Studies

Donald J. Nelson, South Bend, Indiana
Major subject: Communication Arts

Irene Perurena, Panama City, Panama
Major subjects: Peace Studies and Government

Johnny Thabo Pitswane, Ga-Rankuwa, South Africa
Major subject: Government

Gabriele Poole, Napoli, Italy
Major subject: English

David Jeffrey Pritchard, Kent, United Kingdom
Major subject: Peace Studies

Kevin Donald Ranney, Scarborough, Ontario, Canada
Major subject: Peace Studies

Sean F. Reardon, Cincinnati, Ohio
Major subject: Peace Studies

Maria Consuelo Rizo, Cali, Columbia
Major subject: Economics

Carol L. Schaal, South Bend, Indiana
Major subject: English

Peter Michael Schulze, East Berlin, Germany
Major subject: Peace Studies

Phillip Daniel Sessions, Lansing, Michigan
Major subject: Theology

Marion Shaer, Kimberley, South Africa
Major subject: Peace Studies

Bryan Patrick Shea, Spring Field, Massachusetts
Major subject: Psychology. Thesis: The Principles of Autonomy, Nonmaleficence, Beneficence, Justice and Fidelity, and the Process of Ethical Decision Making. Director: Dr. Naomi M. Meara

Elena Dmitrievna Shewliakowa, Kizlyar, Russia
Major subject: Peace Studies

Raki Sia, Lawas, Malaysia
Major subject: Theology

Katarzyna Monika Sikora, Krakow, Poland
Major subject: Peace Studies

Toomas Sillaste, Valga, Russia
Major subject: Peace Studies

Susan Sisko, O.S.B.M., Bridgeport, Connecticut
Major subject: Theology

Jennifer Anne Smead, Nashville, Tennessee
Major subject: Peace Studies

Randi Gale Terry, Canyon, Texas
Major subject: Peace Studies

Tatiana Alexandrovna Tkachenko, Krasnij, Russia
Major subject: Peace Studies

Joan Louise Toner, Pittsburgh, Pennsylvania
Major subject: Peace Studies

Rev. John C. Tosi, New York, New York
Major subject: Theology

Amy Louise Trojanowski, South Bend, Indiana
Major subject: Theology

Slumko W. Tsotsi, Soweto, South Africa
Major subject: Theology

Aditi Viswanathan, Locust Valley, New York
Major subject: Government

George Wachira, Limuru, Kenya
Major subject: Peace Studies

Jane Anne Wilde, Toledo, Ohio
Major subject: Communication Arts

John Kingsley Wise, South Bend, Indiana
Major subject: Theology

Juyan Zhang, Hangzhou, People's Republic of China
Major subject: Peace Studies

THE DEGREE OF MASTER OF SCIENCE ON:

John Edmond Brophy, Falls Church, Virginia
Major subject: Chemistry. Thesis: The Cycloaddition Reactions of 1-t Butyl-3-Methylallene with Variously Substituted Alkenes. Director: Dr. Daniel J. Pasto

John Dennis Olson, Knoxville, Tennessee
Major subject: Physics

Kristina M. Pantelleria, Benton Harbor, Michigan
Major subject: Chemistry. Thesis: Electron-Transfer Properties of Electrode-Immobilized Metalloporphyrin Dimethyl Ester Polymers. Director: Dr. Kathleen A. Macor

James Gaylon Ross, Conway, Arkansas
Major subject: Physics

Kent Wayne Scheller, Haubstadt, Indiana
Major subject: Physics

Thomas Gerard Streit, Notre Dame, Indiana
Major subject: Biological Sciences. Thesis: Variation Among Geographic Strains of *Aedes Albopictus* in Vector Competence for LaCrosse Virus. Co-directors: Dr. George B. Craig, Jr., and Dr. Paul R. Grimstad

Joseph Alexander Swiatek, Cheyenne, Wyoming
Major subject: Physics

**THE DEGREE OF MASTER OF ARCHITECTURE
ON:**

David Christian Carter Foley, Pittsburgh, Pennsylvania

**THE DEGREE OF MASTER OF SCIENCE IN
CHEMICAL ENGINEERING ON:**

Shubhro Ghosh, Allahabad, India

Thesis: Transport Enhancement in Steady and Time-Periodic Stokes Flow between Counter-Rotating Eccentric Cylinders. Director: Dr. Hsueh Chia Chang

Thomas Kerr McBride, Jr., Arlington Heights, Illinois

Thesis: Chemicophysical Modeling of Solid-Fluid Solubilities using NMR Measured Equilibrium Constants. Director: Dr. Joan F. Brennecke

Yong Xia, Shanghai, People's Republic of China

**THE DEGREE OF MASTER OF SCIENCE IN
CIVIL ENGINEERING ON:**

Michael James DeKlotz, Portland, Oregon

Thesis: Dynamics of Wind Excited Base-Isolated Buildings with Passive Dampers. Director: Dr. Ahsan Kareem

Timothy Woon-Wei Ling, Sitiawan, Malaysia

Thesis: Laboratory and Numerical Study of Aperture Estimates Derived from Hydraulic and Tracer Tests in a Single Fracture. Director: Dr. Stephen E. Silliman

**THE DEGREE OF MASTER OF SCIENCE IN
ELECTRICAL ENGINEERING ON:**

Shawn Joseph Gaffney, Chicago, Illinois

Thesis: Electrically Isolated and Passive Temperature Measurement of Mass Transit Third Rails. Director: Dr. William B. Berry

Srivatsan Govindarajan, Madras, India

Thesis: Design of a Multi-Tasking Operating System Kernel. Director: Dr. Genesio L. Hubscher

Mark J. Hahn, Apple Valley, Minnesota

Thesis: Longterm Life Projection of Amorphous Silicon Modules Based on Field Test Data. Director: Dr. William B. Berry

Hong Jiang, Fujian, People's Republic of China

Thesis: A Class of Hysteretic Servomechanisms. Director: Dr. Michael K. Sain

Dinesh Chandrakant Kulkarni, Pune, India

Thesis: Nested Transaction Support for Reliable Distributed Applications. Director: Dr. David L. Cohn

Joseph Varghese Olattupuram, Salem, India

Thesis: Performance Evaluation of Distributed File Systems. Director: Dr. Daniel J. Costello

John Saldanha, Bangalore, India

Thesis: A New Approach to Implementing the ARCADE Architecture. Director: Dr. David L. Cohn

Michael Sheliga, Whiskey Run, Pennsylvania

Thesis: Parallel Search Based on Intensity. Director: Dr. John J. Uhran, Jr.

James Anthony Stiver, Merrill, Wisconsin

Thesis: Modeling of Hybrid Control Systems Using Discrete Event System Models. Director: Dr. Panos J. Antsaklis

**THE DEGREE OF MASTER OF SCIENCE IN
MATERIALS SCIENCE AND ENGINEERING ON:**

Nikesh Bakshi, Ranchi, India

Thesis: Fluoride Based Electrochemical Carbon Sensors. Director: Dr. Charles B. Alcock

Murli G. Kotteyil, Ahmedabad, India

**THE DEGREE OF MASTER OF SCIENCE IN
MECHANICAL ENGINEERING ON:**

Sukhwant S. Khanuja, Kanpur, India

Thesis: On Singularity Avoidance for Manipulators with Spherical Wrists Using Articulated Workpieces. Director: Dr. Michael M. Stanisic

Kamran Lodi, Karachi, Pakistan

Thesis: Application of Curvature Theory to the Trajectory Control Problem of a Planar Manipulator. Director: Dr. Michael M. Stanisic

Pankaj Mithal, Allahabad, India

Tarek Gamal Zaki, Cairo, Egypt

Thesis: Experimental and Numerical Investigation of Flow Past a Freely Rotatable Square Cylinder. Co-Directors: Dr. Mohamed Gad-el-Hak and Dr. Mihir Sen

Sheng Zhou, Notre Dame, Indiana

Donald J. Nelson, South Bend, Indiana
Major subject: Communication Arts

Irene Perurena, Panama City, Panama
Major subjects: Peace Studies and Government

Johnny Thabo Pitswane, Ga-Rankuwa, South Africa
Major subject: Government

Gabriele Poole, Napoli, Italy
Major subject: English

David Jeffrey Pritchard, Kent, United Kingdom
Major subject: Peace Studies

Kevin Donald Ranney, Scarborough, Ontario, Canada
Major subject: Peace Studies

Sean F. Reardon, Cincinnati, Ohio
Major subject: Peace Studies

Maria Consuelo Rizo, Cali, Columbia
Major subject: Economics

Carol L. Schaal, South Bend, Indiana
Major subject: English

Peter Michael Schulze, East Berlin, Germany
Major subject: Peace Studies

Phillip Daniel Sessions, Lansing, Michigan
Major subject: Theology

Marion Shaer, Kimberley, South Africa
Major subject: Peace Studies

Bryan Patrick Shea, Spring Field, Massachusetts
Major subject: Psychology. Thesis: The Principles of Autonomy, Nonmaleficence, Beneficence, Justice and Fidelity, and the Process of Ethical Decision Making. Director: Dr. Naomi M. Meara

Elena Dmitrievna Shewliakowa, Kizlyar, Russia
Major subject: Peace Studies

Raki Sia, Lawas, Malaysia
Major subject: Theology

Katarzyna Monika Sikora, Krakow, Poland
Major subject: Peace Studies

Toomas Sillaste, Valga, Russia
Major subject: Peace Studies

Susan Sisko, O.S.B.M., Bridgeport, Connecticut
Major subject: Theology

Jennifer Anne Smead, Nashville, Tennessee
Major subject: Peace Studies

Randi Gale Terry, Canyon, Texas
Major subject: Peace Studies

Tatiana Alexandrovna Tkachenko, Krasnij, Russia
Major subject: Peace Studies

Joan Louise Toner, Pittsburgh, Pennsylvania
Major subject: Peace Studies

Rev. John C. Tosi, New York, New York
Major subject: Theology

Amy Louise Trojanowski, South Bend, Indiana
Major subject: Theology

Slumko W. Tsotsi, Soweto, South Africa
Major subject: Theology

Aditi Viswanathan, Locust Valley, New York
Major subject: Government

George Wachira, Limuru, Kenya
Major subject: Peace Studies

Jane Anne Wilde, Toledo, Ohio
Major subject: Communication Arts

John Kingsley Wise, South Bend, Indiana
Major subject: Theology

Juyan Zhang, Hangzhou, People's Republic of China
Major subject: Peace Studies

THE DEGREE OF MASTER OF SCIENCE ON:

John Edmond Brophy, Falls Church, Virginia
Major subject: Chemistry. Thesis: The Cycloaddition Reactions of 1-t Butyl-3-Methylallene with Variously Substituted Alkenes. Director: Dr. Daniel J. Pasto

John Dennis Olson, Knoxville, Tennessee
Major subject: Physics

Kristina M. Pantelleria, Benton Harbor, Michigan
Major subject: Chemistry. Thesis: Electron-Transfer Properties of Electrode-Immobilized Metalloporphyrin Dimethyl Ester Polymers. Director: Dr. Kathleen A. Macor

James Gaylon Ross, Conway, Arkansas
Major subject: Physics

Kent Wayne Scheller, Haubstadt, Indiana
Major subject: Physics

Thomas Gerard Streit, Notre Dame, Indiana
Major subject: Biological Sciences. Thesis: Variation Among Geographic Strains of *Aedes Albopictus* in Vector Competence for LaCrosse Virus. Co-directors: Dr. George B. Craig, Jr., and Dr. Paul R. Grimstad

Joseph Alexander Swiatek, Cheyenne, Wyoming
Major subject: Physics

**THE DEGREE OF MASTER OF ARCHITECTURE
ON:**

David Christian Carter Foley, Pittsburgh, Pennsylvania

**THE DEGREE OF MASTER OF SCIENCE IN
CHEMICAL ENGINEERING ON:**

Shubhro Ghosh, Allahabad, India

Thesis: Transport Enhancement in Steady and Time-Periodic Stokes Flow between Counter-Rotating Eccentric Cylinders. Director: Dr. Hsueh Chia Chang

Thomas Kerr McBride, Jr., Arlington Heights, Illinois

Thesis: Chemicophysical Modeling of Solid-Fluid Solubilities using NMR Measured Equilibrium Constants. Director: Dr. Joan F. Brennecke

Yong Xia, Shanghai, People's Republic of China

**THE DEGREE OF MASTER OF SCIENCE IN
CIVIL ENGINEERING ON:**

Michael James DeKlotz, Portland, Oregon

Thesis: Dynamics of Wind Excited Base-Isolated Buildings with Passive Dampers. Director: Dr. Ahsan Kareem

Timothy Woon-Wei Ling, Sitiawan, Malaysia

Thesis: Laboratory and Numerical Study of Aperture Estimates Derived from Hydraulic and Tracer Tests in a Single Fracture. Director: Dr. Stephen E. Silliman

**THE DEGREE OF MASTER OF SCIENCE IN
ELECTRICAL ENGINEERING ON:**

Shawn Joseph Gaffney, Chicago, Illinois

Thesis: Electrically Isolated and Passive Temperature Measurement of Mass Transit Third Rails. Director: Dr. William B. Berry

Srivatsan Govindarajan, Madras, India

Thesis: Design of a Multi-Tasking Operating System Kernel. Director: Dr. Genesio L. Hubscher

Mark J. Hahn, Apple Valley, Minnesota

Thesis: Longterm Life Projection of Amorphous Silicon Modules Based on Field Test Data. Director: Dr. William B. Berry

Hong Jiang, Fujian, People's Republic of China

Thesis: A Class of Hysteretic Servomechanisms. Director: Dr. Michael K. Sain

Dinesh Chandrakant Kulkarni, Pune, India

Thesis: Nested Transaction Support for Reliable Distributed Applications. Director: Dr. David L. Cohn

Joseph Varghese Olattupuram, Salem, India

Thesis: Performance Evaluation of Distributed File Systems. Director: Dr. Daniel J. Costello

John Saldanha, Bangalore, India

Thesis: A New Approach to Implementing the ARCADE Architecture. Director: Dr. David L. Cohn

Michael Sheliga, Whiskey Run, Pennsylvania

Thesis: Parallel Search Based on Intensity. Director: Dr. John J. Uhran, Jr.

James Anthony Stiver, Merrill, Wisconsin

Thesis: Modeling of Hybrid Control Systems Using Discrete Event System Models. Director: Dr. Panos J. Antsaklis

**THE DEGREE OF MASTER OF SCIENCE IN
MATERIALS SCIENCE AND ENGINEERING ON:**

Nikesh Bakshi, Ranchi, India

Thesis: Fluoride Based Electrochemical Carbon Sensors. Director: Dr. Charles B. Alcock

Murli G. Kotteyil, Ahmedabad, India

**THE DEGREE OF MASTER OF SCIENCE IN
MECHANICAL ENGINEERING ON:**

Sukhwant S. Khanuja, Kanpur, India

Thesis: On Singularity Avoidance for Manipulators with Spherical Wrists Using Articulated Workpieces. Director: Dr. Michael M. Stanisic

Kamran Lodi, Karachi, Pakistan

Thesis: Application of Curvature Theory to the Trajectory Control Problem of a Planar Manipulator. Director: Dr. Michael M. Stanisic

Pankaj Mithal, Allahabad, India

Tarek Gamal Zaki, Cairo, Egypt

Thesis: Experimental and Numerical Investigation of Flow Past a Freely Rotatable Square Cylinder. Co-Directors: Dr. Mohamed Gad-el-Hak and Dr. Mihir Sen

Sheng Zhou, Notre Dame, Indiana

The College of Business Administration In the Graduate Division

THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION ON:

Michael Sean Brennan, Easton, Maryland
Kartadjaja Intan, Jakarta, Indonesia

THE DEGREE OF MASTER OF SCIENCE IN ADMINISTRATION ON:

Kevin Scott Abbott, South Bend, Indiana
Carl Bradford Anderson, Mishawaka, Indiana
Sally Ann Blitsch, Waterloo, Iowa
Candace Byers, *With Honors*, South Bend, Indiana
Sandra Lee Daniels, *With Honors*, South Bend, Indiana
Gwendolyn DeJong, Lowell, Indiana
Danielle A. Dyer, South Bend, Indiana
Roya Esfandi, South Bend, Indiana
Lieutenant Edward J. Fairbairn, *With High Honors*,
South Bend, Indiana
Mary Theresa Fairbairn, *With Honors*, South Bend,
Indiana
Alice Fleming, Hobart, Indiana
Diana Lynn Goodsell-Ramsey, South Bend, Indiana
Gary Allen Grannell, St. Joseph, Michigan
Sister Loretta Marie Hall, Wichita, Kansas
John Norris Harding, *With Honors*, New Brunswick,
New Jersey
Darlene K. Holloway, South Bend, Indiana
Michael David Holmes, South Bend, Indiana
Carmen L. Jorge, San Antonio, Texas
Robin Will Kaercher, *With Honors*, Millsburg, Indiana
Edward R. Kinley, *With Highest Honors*, Batavia,
New York
Carmela R. Kinslow, South Bend, Indiana
Rita Mary Kopczynski, South Bend, Indiana
Anthony Charles Laberge, *With Highest Honors*,
South Bend, Indiana
David Robert Markel, Niles, Michigan
Stephen James Matteson, Mishawaka, Indiana
Timothy Paul McGovern, *With Honors*, South Bend,
Indiana
Dawn Quay McLane, *With High Honors*, Mishawaka,
Indiana
Michael Middleton, *With Honors*, Wexford, Ireland

Edward B. Newman, South Bend, Indiana
Sister Patricia A. Norton, *With Honors*, Wheaton, Illinois
Margaret M. O'Drobinak, Crown Point, Indiana
Sandra Papai, LaPorte, Indiana
Sara B. Parker, Mishawaka, Indiana
Sister Marlene R. Quesenberry, San Antonio, Texas
Gayle Elaine Sampson, South Bend, Indiana
Mary-Jean Sully, West Orange, New Jersey
Karri S. Verhelst, *With Highest Honors*, Ripen,
Wisconsin
Jane Ann Zdanowicz, Davis, California

The College of Arts and Letters

THE DEGREE OF BACHELOR OF ARTS ON:

Matthew Richard Ayers, Pasco, Washington
Rebecca Susanne Barnak, Mishawaka, Indiana
Brian Timothy Barrett, Barrington, Illinois
Joseph Alexander Bartosz, Glenview, Illinois
Ann Margaret Buff, Dunwoody, Georgia
Matthew L. Burke, Horseheads, New York
Taryn Leah Collins, Western Springs, Illinois
Dante Edoardo Daly, Baldwinsville, New York
James Danahy, Greensboro, North Carolina
Sean Patrick Dennehy, West Seneca, New York
William Francis Hackett, Sarasota, Florida
Miquel Daniel Huerta, Notre Dame, Indiana
William Ray Hurt, Jr., Greenwood, Indiana
Aram Pothier Jarret, Woonsocket, Rhode Island
Steven Eugene Kubicki, Miami, Florida
Maria Judith Molina, San Antonio, Texas
Matthew Cantwell O'Connor, St. Louis, Missouri
Erin Powers Pipp, Grand Haven, Michigan
Winston Lewis Sandri, Raleigh, North Carolina
Felix Antonio Villalba, South Bend, Indiana
Dain Edward Wahl, Batavia, Ohio
Larissa Ann Wenning, *With Highest Honors*, Lexington,
Kentucky

The College of Science

THE DEGREE OF BACHELOR OF SCIENCE ON:

Jessica Marie Jaurigui, Corpus Cristi, Texas

The College of Engineering

**THE DEGREE OF BACHELOR OF SCIENCE IN
MECHANICAL ENGINEERING ON:**

Frank Ingmar Ilgner, Reston, Virginia
William Michael Nardone, Koppel, Pennsylvania
Mark Gene Raulston, LaGrange, Kentucky

**THE DEGREE OF BACHELOR OF
ARCHITECTURE ON:**

Maria Johanna Barnes, North Royalton, Ohio
Hector Eugenio Moreno, El Paso, Texas

**THE DEGREE OF BACHELOR OF SCIENCE
IN CIVIL ENGINEERING ON:**

Suzanne Louise Arden, Reno, Nevada

The College of Business Administration

**THE DEGREE OF BACHELOR OF BUSINESS
ADMINISTRATION ON:**

Paul G. Bushman, Laguna Beach, California
Richard Lee Culp, Nappanee, Indiana
Gregory LaMonte Davis, South Bend, Indiana
Jean Theresa Kelly, Westlake, Ohio
Antwon Eugene Lark, Santa Ana, California
John Todd Layton, Independence, Kansas
William Craig Mayeux, Charlotte, North Carolina
Michael Gregory McMahon, Oak Brook, Illinois
Robert Woods Merkle, Clearwater, Florida
Gerard Charles Quinlan, Drexel Hill, Pennsylvania
Donald Jack Ritschard, Jr., South Bend, Indiana
James Edward Sexton, South Bend, Indiana

ACADEMIC ATTIRE

Ceremonial garments worn at academic functions take their meaning from the original centers of learning of the Western world in the Church of the Middle Ages. Caps, hoods and gowns of the early students and monks have been held through the centuries to be traditionally symbolic of the scholarly devotion so basic to education and to the deliberate and orderly evolution of knowledge.

The introduction of classical studies, the gradual rise of the great universities across Europe, and the ever-increasing awareness of the decisive role of education in the entire development of civilization influenced leaders among academicians in their desire for a singular identity. In the attempt to create this differentiation, educators fell upon the medieval system of classic heraldry, whereby the coat of arms, assorted ornamental trappings, and patterns of colorful design had been adopted to denote the distinctive character of designated chivalric orders. The function of "pedagogical heraldry" became, then, simply identification. As such, measures were taken to signify through distinctive markings on the academician's attire the institution that had granted the degree, the field of learning in which the degree had been earned, and the level of the degree - bachelor, master or doctorate.

Of the three pieces of academic attire, the cap, the gown and the hood, it is the hood that offers the most abundant and most readily discernible information about its owner. The inner lining of the hood identifies the institution at which the individual earned the degree. Some schools have adopted two-color patterns and introduced chevrons and bars in various designs to set themselves apart from other institutions. The velvet trim bordering the hood indicates the major field of learning, or faculty, in which the degree has been earned. The list at the conclusion of this section will explain this relationship. A final feature of the hood concerns its length and width and distinguishes further between holders of bachelor's, master's, and doctor's degrees. The length of the hood for

the bachelor's degree is three feet, closed at the bottom, and the velvet border is two inches. At Notre Dame, individuals receiving a bachelor's degree do not wear a hood. A master's degree holder has a hood three and one half feet in length with a three inch wide border, and is slit at the bottom. Those individuals with a doctorate degree wear a hood four feet in length, open at the bottom, with a five inch border.

The gown is usually black in color but some American universities, including Notre Dame, have adopted distinctive colors for their robes. Notre Dame doctorate degree robes are blue, reflecting one of its official colors.

The cut of the gown aids in differentiating between the three levels of degrees. The bachelor's gown is relatively simple and falls in straight lines from an elaborate yoke. It may be recognized most readily by the long, pointed sleeves. The master's gown is somewhat fuller and bears no adornment. The sleeves are oblong in shape and open at the wrist, with the rear part of the oblong square cut while the front edge has a cutaway arc. The doctor's gown is more elaborate with velvet panels down the front and around the neck of the garment. The sleeves are bell-shaped at the end and have three bars of the same material as the front panels at the upper portion of the arm. It is cut rather full and may be ornamental in color. Notre Dame's doctoral gown has royal blue velvet front panels with the University's shield embroidered in gold. The royal blue sleeve chevrons are outlined in gold.

The mortarboard or Oxford-type cap has been adopted throughout most universities in the United States, although Notre Dame's doctoral cap is a royal blue tam. Colored tassels are usually worn by holders of the bachelor's and master's degrees. These denote the field of learning. The list on the next page indicates the tassel colors. Gold tassels are reserved for those with doctorate degrees and governing officers of educational institutions.

FACULTY COLORS

AGRICULTURE----- Maize
 ARTS, LETTERS, HUMANITIES----- White
 COMMERCE, ACCOUNTANCY, BUSINESS --- Drab
 DENTISTRY ----- Lilac
 ECONOMICS ----- Copper
 EDUCATION ----- Light Blue
 ENGINEERING----- Orange
 FINE ARTS, INCLUDING
 ARCHITECTURE ----- Brown
 FORESTRY----- Russet
 JOURNALISM ----- Crimson
 LAW ----- Purple
 LIBRARY SCIENCE ----- Lemon
 MEDICINE ----- Green
 MUSIC ----- Pink

NURSING ----- Apricot
 OPTOMETRY ----- Sea Foam Green
 ORATORY (SPEECH)----- Silver Gray
 PHARMACY ----- Olive Green
 PHILOSOPHY----- Dark Blue
 PHYSICAL EDUCATION ----- Sage Green
 PODIATRY-CHIROPODY----- Nile Green
 PUBLIC ADMINISTRATION, INCLUDING
 FOREIGN SERVICE ----- Peacock Blue
 PUBLIC HEALTH ----- Salmon Pink
 SCIENCE ----- Golden Yellow
 SOCIAL SCIENCE ----- Cream
 SOCIAL WORK----- Citron
 THEOLOGY ----- Scarlet
 VETERINARY SCIENCE ----- Gray

Old Gold and Royal Blue in Hood Denotes a Notre Dame Degree

